FIGURE 1A

FIGURE 1C

FIGURE 1B

FIGURE 1D

Synthesis of Lipid Backbone

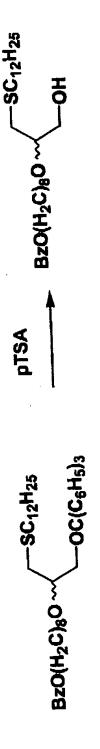


FIGURE 2

Synthesis of AZT-Malonic Acid (AZT-MA)

Substituted malonic acid chlorides (CICOCHRCOCI) could also be used in the above reaction; R = CH₃, CH₂CH₃, C₆H₅

FIGURE

Synthesis of AZT-Phosphocholine Conjugate

-SC₁₂H₂₅ $BzO(H_2C)_8O \sim$ 1. Cl₂PO₂CH₂CH₂Br 2. (CH₃)₃N -SC₁₂H₂₅ $BzO(H_2C)_8O$ ~

AZT-MA DCC/DMAP

AZT-02CCH2CO2(H2C)80 ~ INK-20

FIGURE 4

[14C]-BM 21.1290 concentrations in plasma and lymphoid tissues of female C57BI/6 mice

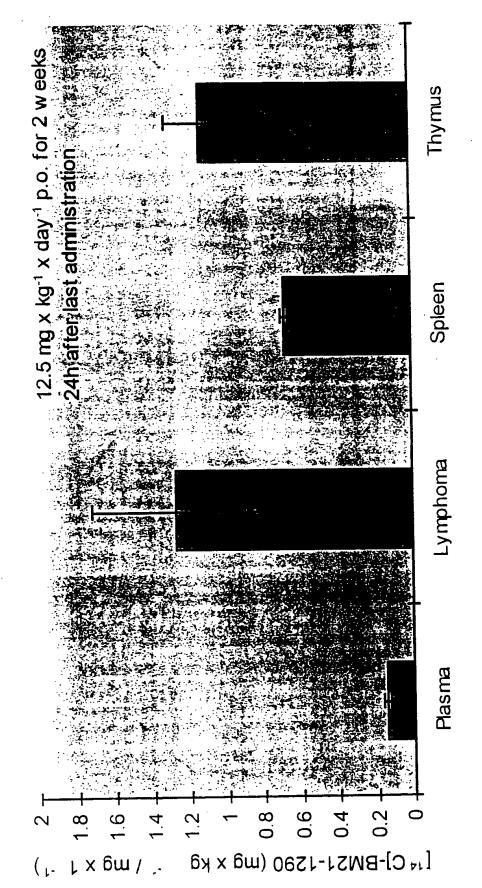


FIGURE 5

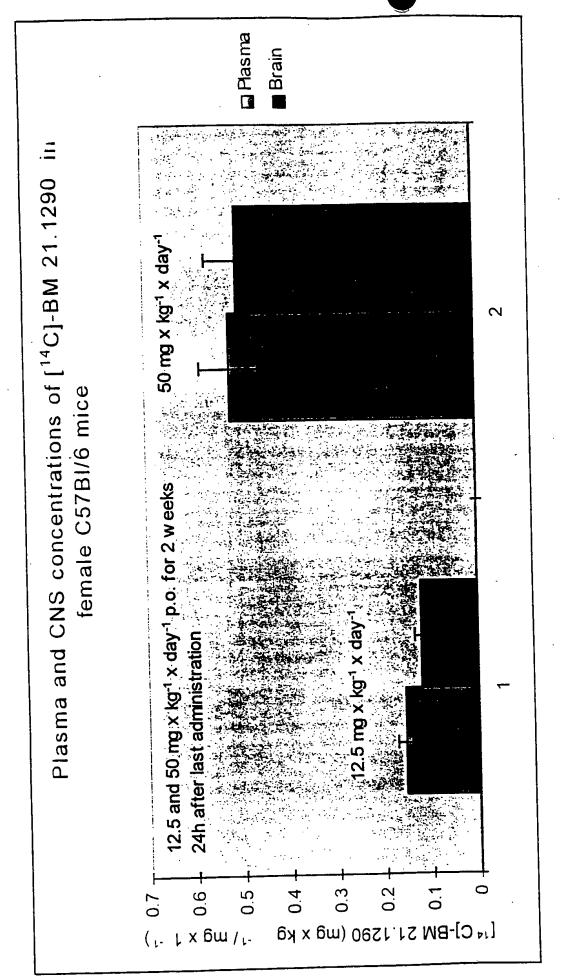


FIGURE 6

lipid & ara-C coupled through phosphate ester

FIGURE 7A

lipid & gemcitabine coupled through phosphate ester

lipid & ara-C coupled through phosphonate ester

FIGURE 8A

lipid & gemcitabine coupled through phosphonate ester

Ilpid coupled to methotrexate through an ester

$$C_{10}H_{21}O - C_{10}H_{25}$$

$$C_{10}H_{21}O - C_{10}H_{21}O - C_{10}H_{21}O$$